



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.            | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-------------|-----------------------|---------------------|------------------|
| 10/549,649                 | 03/15/2007  | Lafayette Ron Hubbard | ASI/1400(US)        | 6172             |
| 55313 7590 03/26/2010      |             |                       |                     |                  |
| SELDON & SCILLIERI         |             |                       |                     |                  |
| 12121 WILSHIRE BLVD.       |             |                       |                     |                  |
| SUITE 1300                 |             |                       |                     |                  |
| LOS ANGELES, CA 90025-1166 |             |                       |                     |                  |
| EXAMINER                   |             |                       |                     |                  |
| DOUGHERTY, SEAN PATRICK    |             |                       |                     |                  |
| ART UNIT                   |             | PAPER NUMBER          |                     |                  |
| 3736                       |             |                       |                     |                  |
| NOTIFICATION DATE          |             | DELIVERY MODE         |                     |                  |
| 03/26/2010                 |             | ELECTRONIC            |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

SELDONLAW@VERIZON.NET

# Office Action Summary

**Application No.**

10/549,649

**Applicant(s)**

HUBBARD ET AL.

**Examiner**

SEAN P. DOUGHERTY

**Art Unit**

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/200)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_
- Paper No(s)/Mail Date 03/25/2009, 04/01/2009

### **DETAILED ACTION**

This is the initial Office action based on the 10/549649 application filed 09/15/2005. Claims 1-10 are currently pending and have been fully considered below.

#### ***Priority***

This application's claim of priority to US Provisional Patent Application Number 60/455,948, filed 03/19/2003, is acknowledged.

#### ***Information Disclosure Statement***

The information disclosure statement(s) (IDS) submitted on 03/25/2009 and 04/01/2009 is/are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement(s) is/are being considered by the Examiner.

#### ***Specification***

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Drawings***

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the lines, numbers and letters in all of the figures are not uniform, clean and well defined (of generally poor quality) (37 CFR 1.84(l)). Applicant is advised

to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Claim Objections***

The Examiner initially notes in some instances of the claimed invention it is unclear if the Applicant is intending to invoke 35 U.S.C. 112 sixth paragraph, because the recitation of "means" appears in various forms throughout the claimed invention. The Examiner notes only where the claim recites the limitation "means for" have been considered under 35 U.S.C. 112 sixth paragraph.

The Examiner respectfully notes, as an example, the recitation of "amplified means" at claim 1, line 6 is not 35 U.S.C. 112 sixth paragraph language as set forth in the MPEP. The Examiner respectfully suggests amendments that would clarify the claimed invention in the instances where the limitation "means" is present, but 35 U.S.C. 112 sixth paragraph has not been invoked:

Amend claim 1, line 6 from "amplifier means for producing an analog measurement" to --an amplifier for producing an analog measurement--;

Amend claim 1, line 14 from "indicator means responsive to the processed measurement" to --an indicator responsive to the processed measurement"--.

The following claims are objected to because of the following informalities:

Amend claim 1, line 1 from "means for means for" to --means for--;

Amend claim 2, line 5 from "said plurality simulation" to --said plurality of electrical resistance values simulating--;

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-6 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 2, the subject matter not described in the specification includes "means for interpolating between the measurement signal values obtained for the simulated body resistance values to quantify the expected measurement signal values for a plurality of additional body resistance values". The Examiner contends that "means for interpolating" has not been described in the specification. The Examiner contends "interpolating between the measurement signal values obtained for the simulated body resistance values to quantify the expected measurement signal values for a plurality of additional body resistance values" has not been described in the specification.

Regarding claim 2, the subject matter not described in the specification also includes "means for forming and storing a table relating expected measurement signal values for respective body resistance values based upon said interpolation". The Examiner contends that "means for forming and storing a table" has not been described in the specification. A "table" is absent from the disclosure". The Examiner notes means for measuring and storing measurement values by way of the automatic calibration circuit have been established, but this disclosure does not enable what has been claimed in claim 2. The Examiner contends ""means for forming and storing a table relating expected measurement signal values for respective body resistance values based upon said interpolation" has not been described in the specification.

Regarding claim 10, the subject matter not described in the specification also includes "means for repeatedly sampling the resistance value of the living body". The Examiner contends that "means for repeatedly sampling" has not been described in the specification. Any mention of a repetition is absent from the disclosure. The Examiner contends "means for repeatedly sampling the resistance value of the living body" has not been described in the specification.

Regarding claim 10, the subject matter not described in the specification also includes "means for repeatedly sampling the resistance value of the living body". The Examiner contends that "means for repeatedly sampling" has not been described in the specification. Any mention of a repetition is absent from the disclosure. The Examiner contends "means for repeatedly sampling the resistance value of the living body" has not been described in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim(s) 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim(s) 1 recite(s) the limitation(s) "the effects". There is insufficient antecedent basis for this/these limitation(s) in the claim(s) because the limitation(s) has/have not been previously recited in the claim(s). For sake of examination, the Examiner has interpreted "the effect" the claim changes is resistance.

Claim(s) 1 recite(s) the limitation(s) "the accuracy". There is insufficient antecedent basis for this/these limitation(s) in the claim(s) because the limitation(s) has/have not been previously recited in the claim(s). For sake of examination, the Examiner has interpreted "the accuracy" to claim small sensed body resistance changes.

The Examiner notes that the claim limitations of claim 2, specifically those reciting the limitation "means for" are being treated under 35 U.S.C. 112 sixth paragraph. 35 U.S.C. 112, sixth paragraph states that a claim limitation expressed in means-plus-function language "shall be construed to cover the corresponding structure...described in the specification and equivalents thereof." "If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set

forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112." In re Donaldson Co., 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (in banc).

Claim(s) 2 recite(s) the limitation(s) "the plurality of measurement signal values" at line 7-8. There is insufficient antecedent basis for this/these limitation(s) in the claim(s) because the limitation(s) has/have not been previously recited in the claim(s). A plurality of measurement values has not been previously established. For sake of examination, the Examiner has interpreted "the plurality of measurement signal values" to claim "the measurement signal" as recited in claim 1.

Claim(s) 2 recite(s) the limitation(s) "the expected measurement signal values" at line 12. There is insufficient antecedent basis for this/these limitation(s) in the claim(s) because the limitation(s) has/have not been previously recited in the claim(s).

Regarding claims 2-6, the Examiner notes the disclosure of the instant application appears to disclose selecting reference points by substituting a known resistance of the body for the body resistance at paragraph 2 of the printed publication of the instant application, however, the Examiner contends there is no recited structure within the disclosure of the instant application that sets forth a structure that performs the limitation "means for substituting a plurality of electrical resistance values in lieu of a body resistance to the amplifier means for sensing, said plurality simulating a variety of body resistance values". All that is recited is such step is performed, but not what structure performs the action. Therefore, claim 2 is indefinite, because the Applicant has



invoked 35 U.S.C. 112 sixth paragraph, and since a structure is not expressly recited for performing such claimed action, the claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For sake of examination, the Examiner has interpreted the indefinite limitation to claim that a calibration circuit is "means for substituting a plurality of electrical resistance values in lieu of a body resistance to the amplifier means for sensing, said plurality simulating a variety of body resistance values".

Regarding claim 2, the Examiner contends there is no recited structure within the disclosure of the instant application that sets forth a structure that performs the limitation "means for interpolating between the measurement signal values obtained for the simulated body resistance values to quantify the expected measurement signal values for a plurality of additional body resistance values". Therefore, claim 2 is indefinite, because the Applicant has invoked 35 U.S.C. 112 sixth paragraph, and since a structure is not expressly recited for performing such claimed action, the claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For sake of examination, the Examiner has interpreted the indefinite limitation to claim that a calibration circuit is "means for interpolating between the measurement signal values obtained for the simulated body resistance values to quantify the expected measurement signal values for a plurality of additional body resistance values".

Regarding claim 2, the Examiner contends there is no recited structure within the disclosure of the instant application that sets forth a structure that performs the limitation

"means for forming and storing a table relating expected measurement signal values for respective body resistance values based upon said interpolation". Therefore, claim 2 is indefinite, because the Applicant has invoked 35 U.S.C. 112 sixth paragraph, and since a structure is not expressly recited for performing such claimed action, the claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For sake of examination, the Examiner has interpreted the indefinite limitation to claim that a calibration circuit is "means for forming and storing a table (50) relating expected measurement signal values for respective body resistance values based upon said interpolation".

Claim(s) 6 recite(s) the limitation(s) "the powering-up" at lines 2-3. There is insufficient antecedent basis for this/these limitation(s) in the claim(s) because the limitation(s) has/have not been previously recited in the claim(s).

Claim(s) 6 recite(s) the limitation(s) "the position", last line. There is insufficient antecedent basis for this/these limitation(s) in the claim(s) because the limitation(s) has/have not been previously recited in the claim(s).

Claim(s) 7 recite(s) the limitation(s) "means for producing the base value as a function of the position of the manually positionable means ". There is insufficient antecedent basis for this/these limitation(s) in the claim(s) because the limitation(s) has/have not been previously recited in the claim(s). The Examiner notes that such means have not been previously established in the claims. The only mention of a base value is the adjustment of a base value at line 7 of claim 7. For sake of examination, the

Examiner has interpreted the adjustment of a base value as the "means for producing the base value as a function of the position of the manually positionable means".

Claim(s) 6 recite(s) the limitation(s) "the spindle's position", line 5. There is insufficient antecedent basis for this/these limitation(s) in the claim(s) because the limitation(s) has/have not been previously recited in the claim(s).

Claim(s) 10 recite(s) the limitation(s) "the magnitude" at line 2, "the subtraction" at line 3, "the scale position" and "the value". There is insufficient antecedent basis for this/these limitation(s) in the claim(s) because the limitation(s) has/have not been previously recited in the claim(s).

Claim(s) 10 recite(s) the limitation(s) "the position", last line. There is insufficient antecedent basis for this/these limitation(s) in the claim(s) because the limitation(s) has/have not been previously recited in the claim(s).

Regarding claim 10, the Examiner contends there is no recited structure within the disclosure of the instant application that sets forth a structure that performs the limitation "means for repeatedly sampling the resistance value of the living body". Therefore, claim 2 is indefinite, because the Applicant has invoked 35 U.S.C. 112 sixth paragraph, and since a structure is not expressly recited for performing such claimed action, the claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For sake of examination, the Examiner has interpreted the indefinite limitation to claim that a calibration circuit is "means for repeatedly sampling the resistance value of the living body".

The Examiner respectfully notes a great number of 35 U.S.C. 112 paragraph issues have been presented above. The Examiner has thoroughly attempted to address each issue, however, more may remain. The Applicant's assistance is requested to resolve each addressed issue above, and resolve any additional issues that may remain.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,011,992 to Hubbard et al. (hereinafter "Hubbard").

Regarding claim 1, Hubbard discloses a device for indicating changes in resistance of a living body comprising:

- a resistance measuring circuit (20) having external leads (64 and 66) for sensing the resistance of a living body placed across the external leads (col. 1, ll. 47-52);
- amplifier means (22) for producing an analog measurement signal indicative of the sensed body resistance (col. 2, ll. 59-61);
- an indicator circuit (24) for displaying visually perceivable indicia representative of the sensed body resistance (col. 2, ll. 61-67);

- a digital processing unit (54) for digitizing ("analog to digital converter" col. 8, ll. 15-18) and digitally processing ("MCU" col. 9, ll. 14-22) the measurement signal to substantially offset the effects of component aging, tolerances and temperature on the accuracy of the measurement signal (col. 13, ll. 47-67); and
- indicator means (32) responsive to the processed measurement signal for displaying visually perceivable indicia representative of small sensed body resistance changes (col. 3, ll. 24-26).

Regarding claim 2, Hubbard discloses where the digital processing unit includes

- means for substituting (50) a plurality of electrical resistance values in lieu of a body resistance to the amplifier means for sensing, said plurality simulating a variety of body resistance values,
- means for digitizing (38) and storing (50) in memory the plurality of measurement signal values corresponding to the plurality of simulated body resistance values,
- means for interpolating (50) between the measurement signal values obtained for the simulated body resistance values to quantify the expected measurement signal values for a plurality of additional body resistance values, and
- means for forming and storing a table (50) relating expected measurement signal values for respective body resistance values based upon said interpolation.

The Examiner notes that the Applicant has invoked 35 U.S.C. 112 sixth paragraph by way of the recitation of "means for" in claims 2

Regarding claims 3-5, Hubbard discloses where the substituting means includes a multiplexer (540) responsive to a plurality of selection values to place a respective one

of a plurality of electrical resistors in the resistance measuring circuit in lieu of the external leads (col. 11, ll. 57 to col. 12, ll. 11).

Regarding claim 6, the Examiner notes the disclosure of the instant application establishes that activating the power of the calibration circuit is sufficient to begin calibration, and thus, substitution. Hubbard discloses a calibration circuit that may be automatically activated via a coming out of a sleep mode (472), because the calibration circuit is disclosed as being capable of being turned on and/or activated. The Examiner notes that the Applicant has invoked 35 U.S.C. 112 sixth paragraph by way of the recitation of "means for" in claims 6.

Regarding claim 7, the Examiner notes the disclosure of the instant application establishes that means for subtracting is a CPU at paragraph 39 (printed publication). Hubbard discloses a CPU (334). The Examiner notes that the Applicant has invoked 35 U.S.C. 112 sixth paragraph by way of the recitation of "means for" in claims 7. Hubbard further discloses manually positionable means (78) operable by the user to adjust a base value. Hubbard discloses a display that may be considered an optical encoder (col. 2, ll. 61-67) because the display is an optical component that receives code for display and is coupled the means for producing the base value as a function of the position of the manually positionable means.

Regarding claim 10, Hubbard discloses:

- means for repeatedly sampling (50) the resistance value of the living body;
- means for subtracting each sampled value from the adjusted base value to obtain the measurement signal - Hubbard discloses a CPU (334); the Examiner

notes the disclosure of the instant application establishes that means for subtracting is a CPU at paragraph 39 (printed publication).

- sensitivity adjustment means ("sensitivity control" col. 13, ll. 45) for coupling the measurement signal to the indicator means,
- the sensitivity adjustment means including means for multiplying the measurement signal by a gain factor which depends on the position of the manually-adjustable means - Hubbard discloses a CPU (334); the Examiner notes the disclosure of the instant application establishes that including means for multiplying the measurement signal by a gain factor is a central processor at paragraph 50 (printed publication).

The Examiner notes that the Applicant has invoked 35 U.S.C. 112 sixth paragraph by way of the recitation of "means for" in claims 10.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,011,992 to Hubbard et al. (hereinafter "Hubbard") in view of US 3,557,352 to Hogg et al. (hereinafter "Hogg").

Regarding claims 8 and 9, Hubbard discloses the claimed invention as set forth and cited above, except for where the manually positionable means consists of a manually rotatable knob, and a rotatable spindle coupled to the knob and means for producing a digital output signal indicative of the spindle's position. Hogg is a reference that teaches at col. 8, ll. 33-50 a circuit device, where a voltage can be changed by use of a knob or a moveable member and a spindle (42) and means for producing a digital output signal of the spindle's position (40). One having an ordinary skill in the art at the time the invention was made would have found it obvious to modify the device of Hubbard to include the knob, spindle and means for producing a digital output of Hogg, as Hogg teaches at col. 8, ll. 33-50 that a voltage component may be varied in such a manner and the knob and spindle can be used to route charges representing the respective pulses. Therefore, a skilled artisan would have found the combination of Hubbard and Hogg obvious

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN P. DOUGHERTY whose telephone number is



Art Unit: 3736

(571)270-5044. The examiner can normally be reached on Monday-Friday, 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sean P. Dougherty/  
Examiner, Art Unit 3736

/Max Hindenburg/  
Supervisory Patent Examiner, Art Unit 3736